

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 04 NOV 1999

WIPO PCT

Applicant's or agent's file reference 37577-0015PC	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US98/21807	International filing date (day/month/year) 14 OCTOBER 1998	Priority date (day/month/year) 14 OCTOBER 1997
International Patent Classification (IPC) or national classification and IPC Please See Supplemental Sheet.		
Applicant ADVANCED CHEMICAL SYSTEMS INTERNATIONAL, INC.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

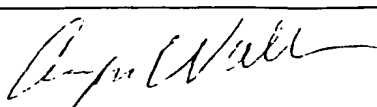
2. This REPORT consists of a total of 6 sheets.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 31 MARCH 1999	Date of completion of this report 18 OCTOBER 1999
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer CHARLES BOYER  Telephone No. (703) 308-0661

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US98/21807

## I. Basis of the report

1. This report has been drawn on the basis of *(Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments):*

- ☒ the international application as originally filed.
- ☒ the description, pages 1-6, as originally filed.  
pages NONE, filed with the demand;  
pages NONE, filed with the letter of \_\_\_\_\_;  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☒ the claims, Nos. 1-26, as originally filed.  
Nos. NONE, as amended under Article 19.  
Nos. NONE, filed with the demand.  
Nos. NONE, filed with the letter of \_\_\_\_\_;  
Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☒ the drawings, sheets/~~fig~~ none, as originally filed.  
sheets/~~fig~~ NONE, filed with the demand.  
sheets/~~fig~~ NONE, filed with the letter of \_\_\_\_\_;  
sheets/~~fig~~ \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

- ☒ the description, pages none.
- ☒ the claims, Nos. none.
- ☒ the drawings, sheets/~~fig~~ none.

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

none

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
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## III. N n-establishment of opinion with regard to novelty, inventive step and industrial applicability

The question whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:

☐ the entire international application.

☒ claims Nos. 14-26

because:

☐ the said international application, or the said claim Nos. \_ relate to the following subject matter which does not require international preliminary examination (*specify*).

OR

the said

description

is so unclear

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_ are so unclear that no meaningful opinion could be formed (*specify*).

☐ the claims, or said claims Nos. \_ are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 14-26.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☒ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☒ not complied with for the following reasons:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-13, drawn to a cleaning composition.

Group II, claim(s) 14-26, drawn to a method for fabricating a semiconductor.

The inventions listed as Groups I and II do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claims 1-13 are unobvious over the prior art, US 3,887,497. Accordingly, the special technical feature linking the two inventions, a cleaning composition, does not provide a contribution over the prior art, and no single inventive concept exists. Therefore, the holding of Lack of Unity of Invention is proper.

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.
- ☐ the parts relating to claims Nos. .

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>1-13</u>	YES
	Claims <u>none</u>	NO
Inventive Step (IS)	Claims <u>none</u>	YES
	Claims <u>1-13</u>	NO
Industrial Applicability (IA)	Claims <u>1-13</u>	YES
	Claims <u>none</u>	NO

**2. CITATIONS AND EXPLANATIONS**

Claims 1-13 lack an inventive step under PCT Article 33(3) as being obvious over Ulvild, US 3,887,497.

Ulvild teaches a liquid cleansing composition (see abstract). Suitable builders of the invention include ammonium borate, sodium tetraborate, monoethanolamine, triethanolamine, and diglycolamine (col. 3, line 57-col. 4, line 68). Ulvild does not exemplify a composition containing these ingredients, however it would have been obvious to one of ordinary skill in the art to incorporate these components in a detergent composition as Ulvild teaches these components as suitable in his detergent compositions.

Claims 1-13 meet the requirements for novelty under PCT Article 33(2) as the prior art does not exemplify the presently claimed composition.

Claims 1-13 meet the requirements for industrial applicability as defined by PCT Article 33(4) as the presently claimed composition is a cleaning composition.

----- NEW CITATIONS -----  
NONE

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**CLASSIFICATION:**

The International Patent Classification (IPC) and/or the National classification are as listed below:  
IPC(6): and US Cl.: US Cl.: 510/150, 175, 176, 178, 212, 345, 460, 465, 486, 499: 438/906, 690

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

United States Patent and Trademark  
Office  
(Box PCT)  
Crystal Plaza 2  
Washington, DC 20231  
ÉTATS-UNIS D'AMÉRIQUE

in its capacity as elected Office

<b>Date of mailing (day/month/year)</b> 21 May 1999 (21.05.99)	
<b>International application No.</b> PCT/US98/21807	<b>Applicant's or agent's file reference</b> 37577-0015 PC
<b>International filing date (day/month/year)</b> 14 October 1998 (14.10.98)	<b>Priority date (day/month/year)</b> 14 October 1997 (14.10.97)
<b>Applicant</b> WOJTCZAK, William, A. et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

31 March 1999 (31.03.99)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b>  C. Cupello  Telephone No.: (41-22) 338.83.38
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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US98/21807

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : C11D 3/30, 3/43; G03C 11/12; H01L 21/304, 21/3065

US CL : Please See Extra Sheet.

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 510/150, 175, 176, 178, 212, 345, 460, 465, 486, 499; 438/906, 690

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

APS, CAPLUS search terms: mea, tea, ammonium borate, nmp

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	US 5,783,538 A (TOTOKI et al) 21 July 1998 (21-07-98), column 4, line 48-column 6, line 23.	1-7, and 9-13
Y	US 3,887,497 A (ULVILD) 03 June 1975 (03-06-75), column 4, lines 25-60.	1-13
A	US 5,482,566 A (LEE) 09 January 1996 (09-01-96).	1-13
A	US 4,786,578 A (NEISIUS et al) 22 November 1988 (22-11-88).	1-13
A	US 5,128,057 A (BIXENMAN et al) 07 July 1992 (07-07-92).	1-13
A,P	US 5,780,406 A (HONDA et al) 14 July 1998 (14-07-98).	1-13

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

10 DECEMBER 1998

Date of mailing of the international search report

14 JAN 1999

 Name and mailing address of the ISA/US  
 Commissioner of Patents and Trademarks  
 Box PCT  
 Washington, D.C. 20231

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Authorized officer

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US98/21807

**A. CLASSIFICATION OF SUBJECT MATTER:**

**US CL :**

510/150, 175, 176, 178, 212, 345, 460, 465, 486, 499; 438/906, 690